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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/632,248	08/03/2000	Wolfgang Maus	E-41007	1144

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EXAMINER	
TRAN, HIEN THI	

ART UNIT	PAPER NUMBER
1764	

DATE MAILED: 02/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/632,248	MAUS, WOLFGANG	
	Examiner	Art Unit	
	Hien Tran	1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,6-15,18,19,21 and 22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3, 6-15, 18-19, 21-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2, 8, 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, it is unclear as to what structural limitation is intended by "a fold", it appears that the language of the claim is directed to method of making which renders the claim vague and indefinite as it is unclear as to what structural limitation applicant is attempting to recite. See claim 14 likewise.

In claim 8, the language of the claim is directed to method of making which renders the claim vague and indefinite as it is unclear as to what structural limitation applicant is attempting to recite.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-3, 7-8, 12-15, 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Locker et al (6,077,483).

With respect to claims 1-2, 7-8, 12-14, 19, Locker et al discloses a catalytic exhaust gas purification device comprising:

a steel casing 16;

a monolithic ceramic honeycomb element 10 mounted in said casing 16;

a compensating layer disposed between said casing 16 and said honeycomb element 10; said compensating layer comprising:

a swelling mat or intumescent mat 14 with border regions at risk from abrasion;

an insulating layer 12 having a border and an inner region; said border of said insulating layer 12 having a thicker region 12A than said inner region; and

said swelling mat 14 being disposed adjacent a side of said inner region of said insulating layer 12 facing away from said honeycomb element 10 and said thicker region 12A of said border of said insulating layer 12 covering said border regions of said swelling mat 14 at risk from abrasion (Fig. 2);

said compensating layer is wrapped around the honeycomb element 10 (col. 7, lines 15-53).

With respect to claims 3, 15, Locker et al discloses that the insulating layer contains ceramic material (col. 4, lines 15-40).

Instant claims 1-3, 7-8, 12-15, 19 structurally read on the apparatus of Locker et al.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. The art area applicable to the instant invention is that of catalytic converter.

One of ordinary skill in this art is considered to have at least a B.S. degree, with additional education in the field and at least 5 years practical experience working in the art; is aware of the state of the art as shown by the references of record, to include those cited by applicants and the examiner (*ESSO Research & Engineering V Kahn & Co*, 183 USPQ 582 1974) and who is presumed to know something about the art apart from what references alone teach (*In re Bode*, 193 USPQ 12, (16) CCPA 1977); and who is motivated by economics to

depart from the prior art to reduce costs consistent with the desired product characteristics. *In re Clinton* 188 USPQ 365, 367 (CCPA 1976) and *In re Thompson* 192 USPQ 275, 277 (CCPA 1976).

8. Claims 6 and 18 rejected under 35 U.S.C. 103(a) as being unpatentable over Locker et al (6,077,483) in view of Ten Eyck (4,999,168).

Since it is unclear as to what structural limitation applicant is attempting to recite as set forth above, as best understood, the apparatus of Locker et al is substantially the same as that of the instant claims, but fails to disclose whether the swelling mat may swell upon absorbing water.

However, Ten Eyck discloses the conventionality of providing a swelling mat containing mica as that of the instant invention and therefore inherently swells upon absorbing water (col. 5, lines 40-44).

It would have been obvious to one having ordinary skill in the art to alternatively select an appropriate material for the swelling mat, such as mica, as taught by Ten Eyck in the apparatus of Locker et al on the basis of its suitability for the intended use as a matter of obvious design choice to obtain the desired supporting and insulating the catalyst element thereof, absence showing any unexpected results and since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In *re Leshin*, 125 USPQ 416.

9. Claims 9-11, 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Locker et al (6,077,483) in view of Santiago et al (4,344,922) and Ten Eyck (4,999,168).

The apparatus of Locker et al is substantially the same as that of the instant claims, but fails to disclose whether the compensating layer may be prefabricated segments.

However, Santiago et al and Ten Eyck disclose the conventionality of providing a compensating layer in form of prefabricated segment.

It would have been obvious to one having ordinary skill in the art to use the compensating layer in prefabricated segment form as taught by Santiago et al and Ten Eyck in the apparatus of Locker et al, on the basis of its suitability for the intended use as a matter of obvious design choice to obtain the desired supporting the catalyst element thereof, absence showing any unexpected results.

Response to Arguments

10. Applicant's arguments filed 12/10/03 have been fully considered but they are not persuasive.

Applicant argues that in the instant application, the method used to locate the compensating layer between the casing and the honeycomb element does make a difference in the structure of the final product. Such contention is not persuasive as it is unclear as to what the difference in the structure of the final product. As admitted by applicants, the instant claim is a product-by-process claim. When the patentability of a product-by-process claim is determined, the relevant inquiry is whether the product itself is patentable. *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972). If a product is the same as or would have been obvious to one having ordinary skill in the art from a product of the prior art, the product is unpatentable even though the prior art product was made by different process. *In re Thorpe*, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985). Since the product of the instant claim is substantial

the same as that of Locker et al, it is unpatentable even though the product of Locker et al was made by different process.

Applicants argue that the compensating layer of Locker et al is not wound around the honeycomb element. That may be so. However, as discussed before, the instant claim is directed to a product-by-process claim and if a product is the same as or would have been obvious to one having ordinary skill in the art from a product of the prior art, the product is unpatentable even though the prior art product was made by different process.

In this case, Locker et al discloses a catalytic converter having all of the structural elements set forth in the instant claims, e.g. a casing, a honeycomb element and a compensating layer therebetween. Since the product of Locker et al is substantially the same as that of the instant claim, the product as recited in the instant claim is unpatentable even though the product of Locker may be made by different process.

Applicant argues that the language of claim 2 recites a structure that the insulating mat 7 is formed with a folded thicker region at its border. Such contention is not persuasive as the language of claim 2 is interpreted as a structure having the insulating mat with a thicker region at its border. How the thicker region is formed is irrelevant in apparatus claims.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien Tran whose telephone number is (571) 272-1454. The examiner can normally be reached on Tuesday-Friday from 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hien Tran

Hien Tran
Primary Examiner
Art Unit 1764

HT
February 8, 2004